

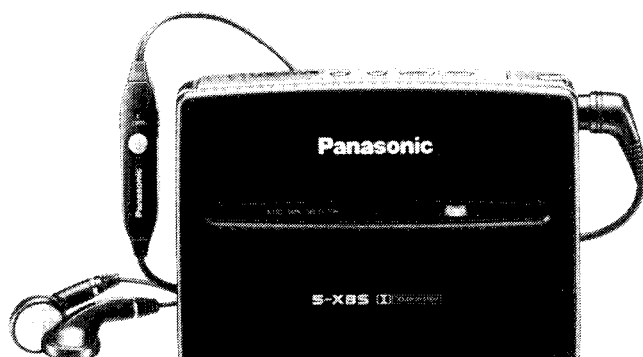
Service Manual

Stereo Cassette Player

 Mini Cassette
RQ-S11

Color

(K)... Black Type



Area

Country Code	Area	Color
(E)	Continental Europe.	(K)
(EB)	Great Britain.	

MECHANISM SERIES (AR90)

■ SPECIFICATIONS

Power Requirement:	AC; with an optional AC adaptor (E)...RP-AC11E, (EB)...RP-AC11EB Battery; with one "AA" size battery (DC: 1.5V) Rechargeable Battery; with an included Rechargeable Battery; 1.2V
Power Output:	6mW + 6mW
Input:	DC IN; 1.5V (mini jack, $\diamond \text{---} \text{---} \diamond$)
Output:	Headphones; 16 Ω (ϕ 3.5)
Dimensions:	106.6 (W) \times 72.6 (H) \times 19.5 (D) mm
Weight:	145 g (with Rechargeable Battery)
Frequency Response:	15~20,000 Hz (with a normal tape) 15~20,000 Hz (with a CrO ₂ type tape) 15~20,000 Hz (with a Metal tape)
Tape Speed:	4.8 cm/s
Track System:	4-track 2-channel stereo playback
Charger:	Input; (E)...AC 220V, 50Hz 4W RP-BC155EY-0 Input; (EB)...AC 240V, 50Hz 4W RP-BC155EBYA

Design and specifications are subject to change without notice.

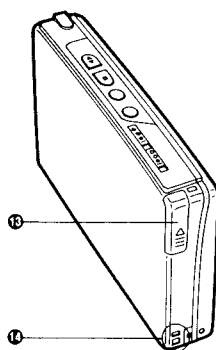
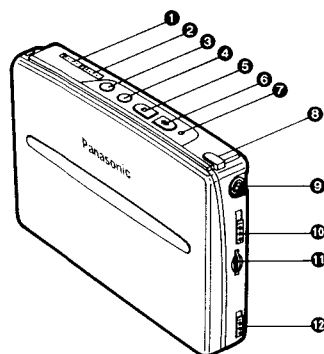
Panasonic
Matsushita Electric Industrial Co., Ltd.
 Central P.O. Box 288, Osaka 530-91, Japan

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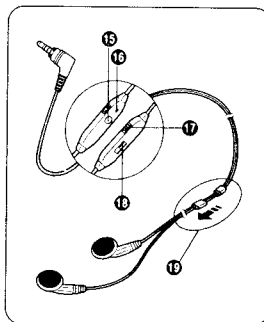
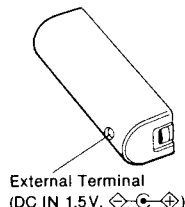
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LOCATION OF CONTROLS



Accessory (Battery Case)




- ① Reverse Mode Switch (REV MODE)
- ② Hold Switch (HOLD)
- ③ Rewind Button (REW)
- ④ Fast Forward Button (FF)
- ⑤ Stop Button (■ STOP)
- ⑥ Play/Direction Button (◀▶ PLAY/DIR)
- ⑦ Operation/Battery Check Indicator (OPR/BATT)
- ⑧ Push Open Button (PUSH OPEN)
- ⑨ Headphones Jack () 16Ω φ3.5
- ⑩ S-XBS Switch (S-XBS)
- ⑪ Volume Control (VOLUME)
- ⑫ Dolby® Noise Reduction Button (DOLBY NR)
- ⑬ Rechargeable Battery Cover
- ⑭ Connection part for Battery Case

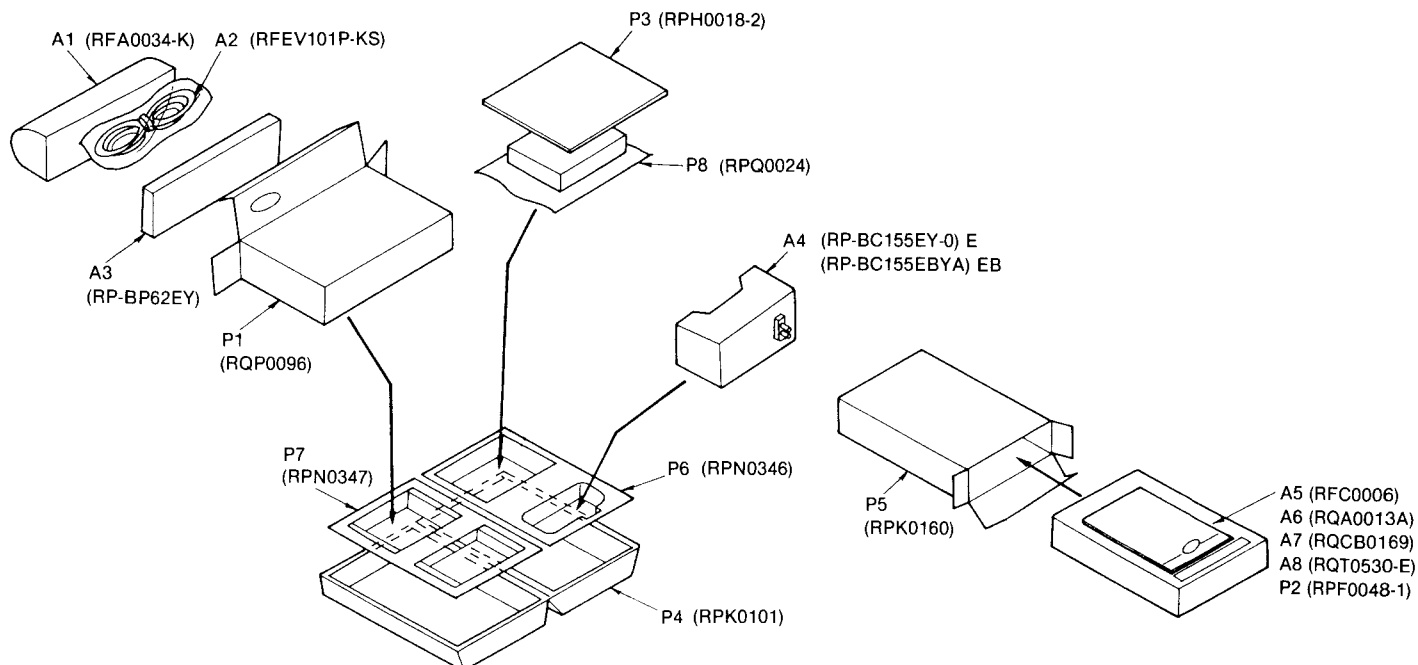
Stereo Earphones with remote controller

- ⑮ Remote Control Button
- ⑯ Operation Indicator
- ⑰ Hold Switch
- ⑱ Volume Control
- ⑲ Slider

When not in use, slide to prevent entanglement of the cord.

*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
 "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

PACKING



■ PROCEDURE FOR THE REPLACEMENT OF THE MECHANISM BLOCK

• How to replace the mechanism block

The mechanism block is supplied without other parts as a semi-assembly. The head block, motor and belt are supplied separately from the mechanism block.

If the mechanism block is exchanged as a replacement assembly, follow the preparation procedure below.

Preparation procedure

Remove the head block, motor and belt from the mechanism to be replaced and replace those parts to the new mechanism block.

(Refer to the "PROCEDURES FOR DISASSEMBLY OF THE MAIN PARTS ON THE MECHANISM".)

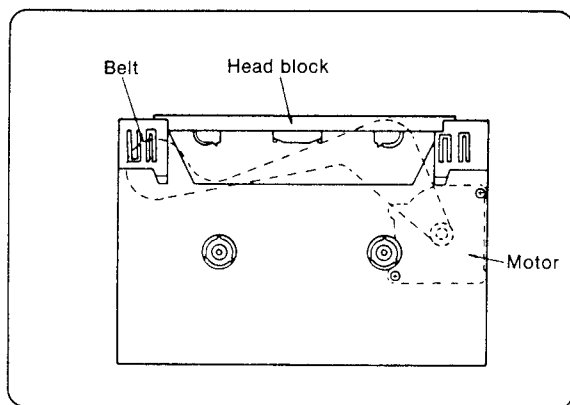
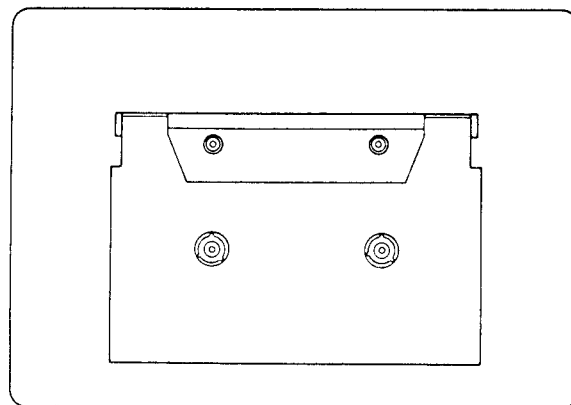


Fig. 1



Mechanism block

Fig. 2

※ The adjustment of the mechanism block is unnecessary after replacement.

• How to replace the head block

The head and pinch roller are supplied together in the head block. The pinch roller is also supplied separately.

Preparation procedure

The head block for replacement is not supplied with a holder as shown in the figure below. Therefore, remove the holder from the block to be repaired and mount it to the new head block. Then, proceed to replace the head block. (Refer to "PROCEDURES FOR DISASSEMBLY OF THE MAIN PARTS ON THE MECHANISM".)

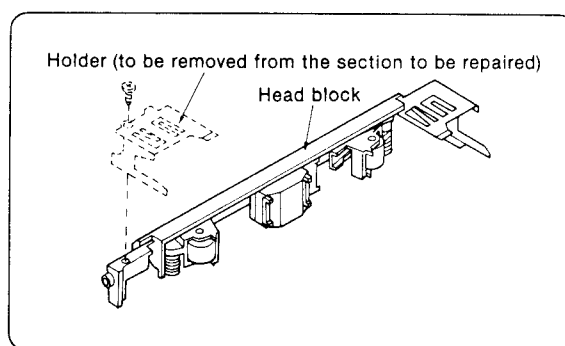


Fig. 3

※ Head azimuth adjustment is unnecessary.

PROCEDURES FOR DISASSEMBLY OF THE MAIN PARTS ON THE MECHANISM

• How to remove the mechanism

Follow the procedures in Ref. Nos. 1~6 in the Disassembly Instructions. (See pages 5, 6.)

※ After replacing the parts, refer to the notes for assembly. (See page 6.)

• How to remove the head block and pinch roller

1. Follow the procedures in Ref. Nos. 1 and 6 in the Disassembly Instructions, remove the rear cabinet and cassette compartment lid. (See pages 5 and 6.)
2. Remove 6 solders (Head FPC). (See Fig. 4.)
3. Remove 2 screws (①, ②) in order to remove the head block. (See Fig. 5.)
4. Remove 2 washers. (See Fig. 6.)
5. Remove 2 springs in order to remove the pinch roller. (See Fig. 7.)

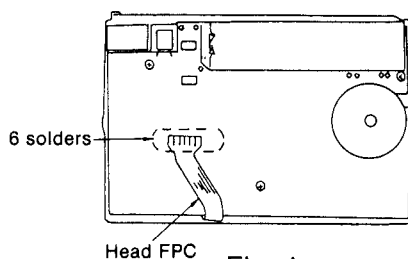


Fig. 4

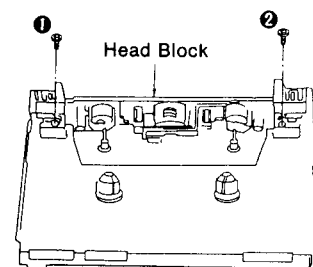


Fig. 5

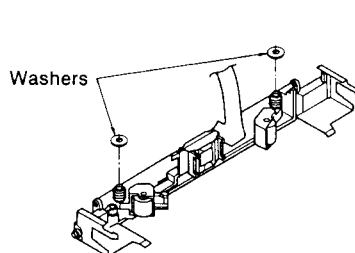


Fig. 6

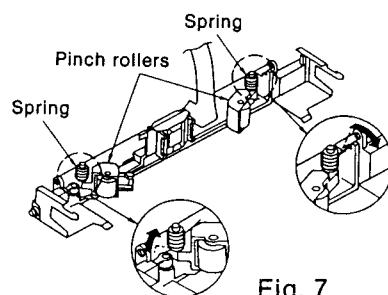


Fig. 7

• How to remove the motor and belt

1. Follow the procedures in Ref. Nos. 1~4 in the Disassembly Instructions. (See page 5.)
2. Remove the washer and motor wheel to remove the belt from the motor pulley. (See Fig. 8.)
3. Remove 2 screws (①, ②) in order to remove the motor. (See Fig. 9.)
4. Remove 2 screws (③, ④) and then the attachment plate to remove the belt. (See Fig. 10.)

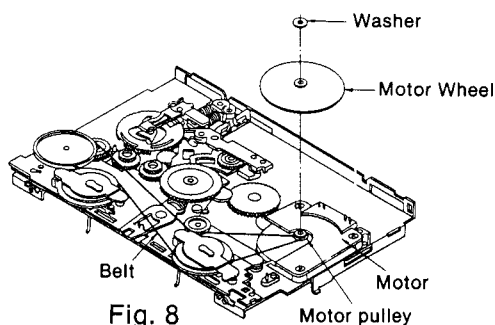


Fig. 8

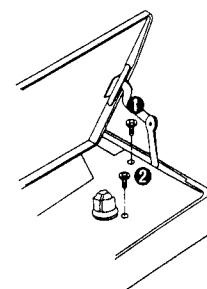


Fig. 9

• How to attach the belt

1. Attach the belt as shown in the figure. (See Fig. 11.)
2. Mount the attachment plate and secure it with 2 screws. (See Fig. 11.)

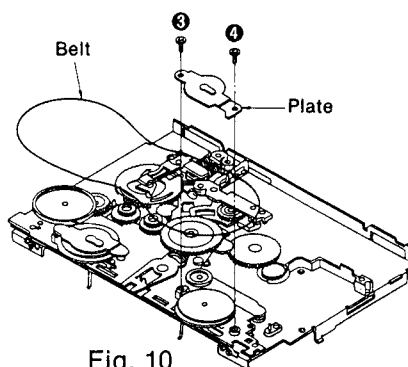


Fig. 10

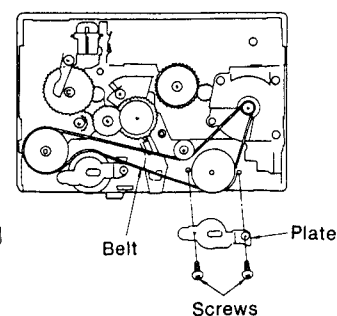
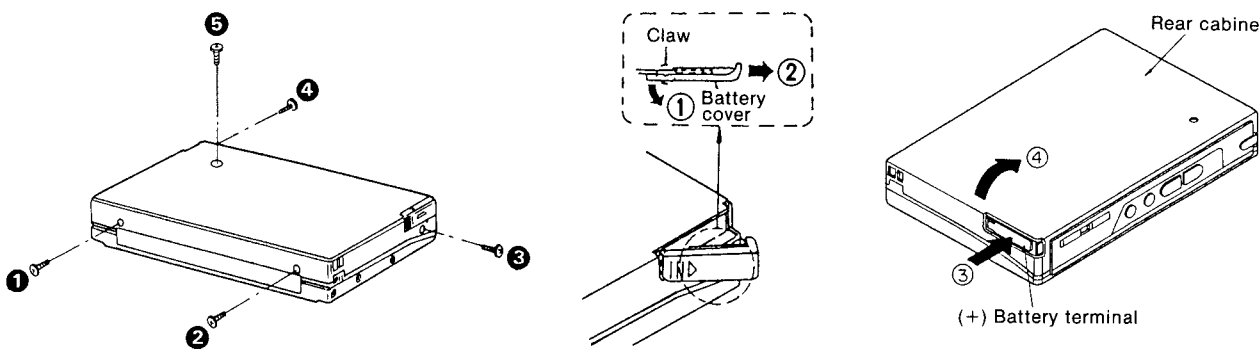
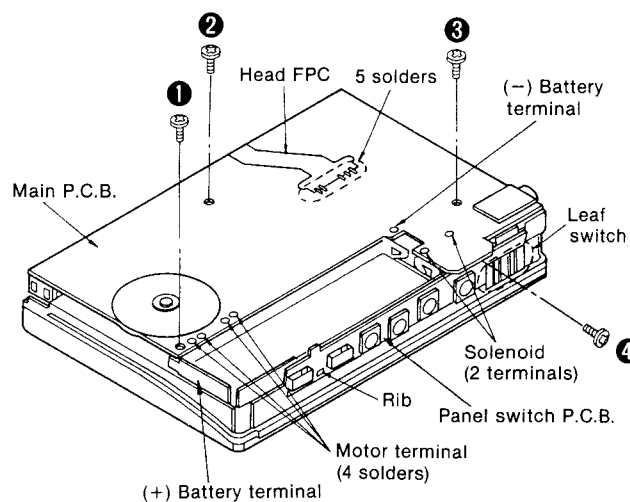
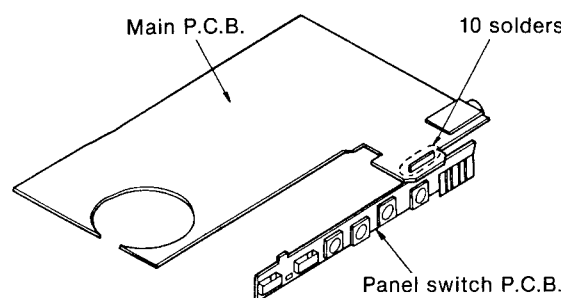
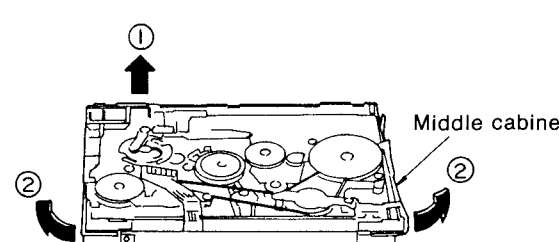
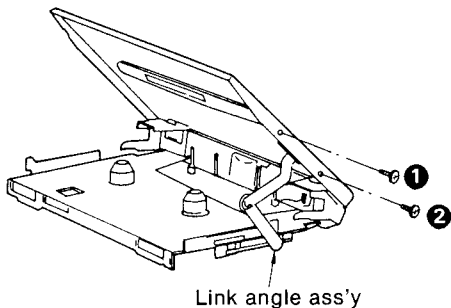
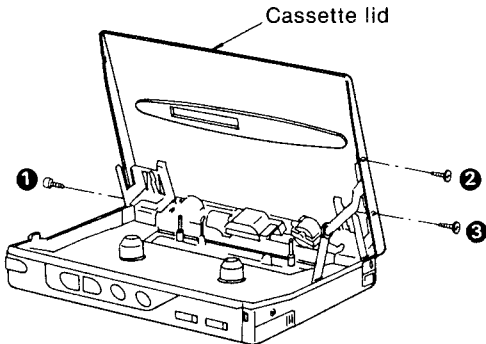


Fig. 11

DISASSEMBLY INSTRUCTIONS

THIS UNIT CONTAINS F.P.C. BE CAREFUL NOT TO CUT OR DAMAGE THE FOIL DURING DISASSEMBLY.

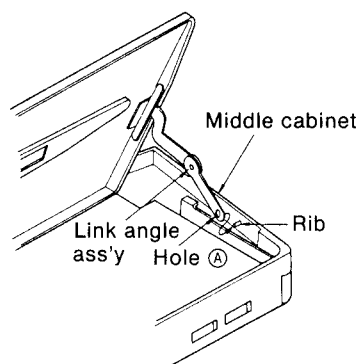
Ref. No. 1	Removal of the rear cabinet		
Procedure 1	<div>1. Remove 5 screws (①~⑤).</div> <div>2. Remove the claw in the direction of arrow ①, and remove the battery cover in the direction of arrow ②.</div> <div>3. Remove the rear cabinet in the direction of arrow ④ while pushing the (+) battery terminal in the direction of arrow ③.</div>		
<div></div>			
Ref. No. 2	Removal of the main P.C.B. and panel switch P.C.B.		
Procedure 1→2	<div>1. Remove 4 screws (①~④).</div> <div>2. Remove 5 solders on the head FPC.</div> <div>3. Remove 4 solders on the motor terminal.</div> <div>4. Remove 2 solders on the solenoid terminal.</div> <div>5. Remove 1 solder on the (-) battery terminal.</div> <div>6. Remove the rib, and then remove the main P.C.B. and panel switch P.C.B. carefully.</div> <div>Note: 1. Be careful to handle leaf switch. 2. When the main P.C.B. is removed, the (+) battery terminal will also be removed.</div>		
<div></div>			
Ref. No. 3	Removal of the panel switch P.C.B.	Ref. No. 4	Removal of the middle cabinet
Procedure 1→2→3	<div>• Remove 10 solders.</div>	Procedure 1→2→3→4	<div>• Push the middle cabinet in the direction of arrows ② and then remove it in the direction of arrow ①.</div>
<div></div>		<div></div>	

Ref. No. 5	Removal of the link angle ass'y	Ref. No. 6	Removal of the cassette lid
Procedure 1→2→3→4→5	<ul style="list-style-type: none"> Remove 2 screws (①, ②). 	Procedure 6	<ol style="list-style-type: none"> Open the cassette lid. Remove 3 screws (①~③) in order to remove the cassette lid. 

Notes for assembly

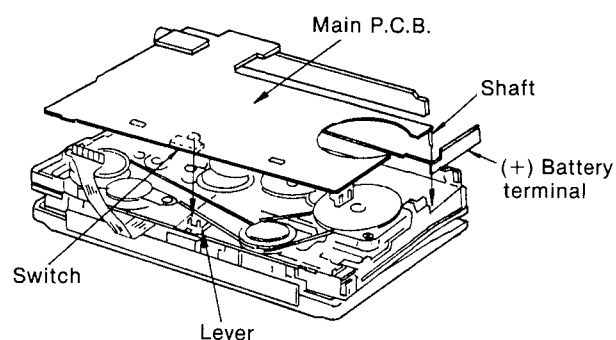
•How to install the middle cabinet

Engage hole ① of the link angle ass'y in the rib of the middle cabinet.

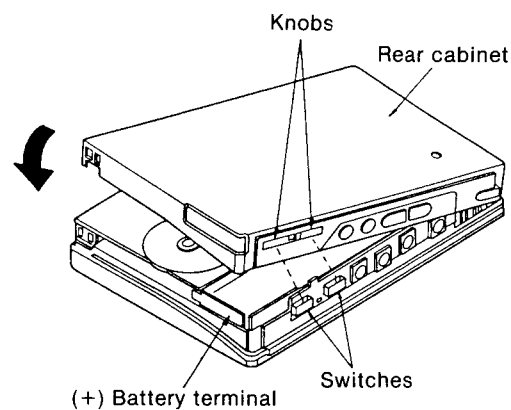
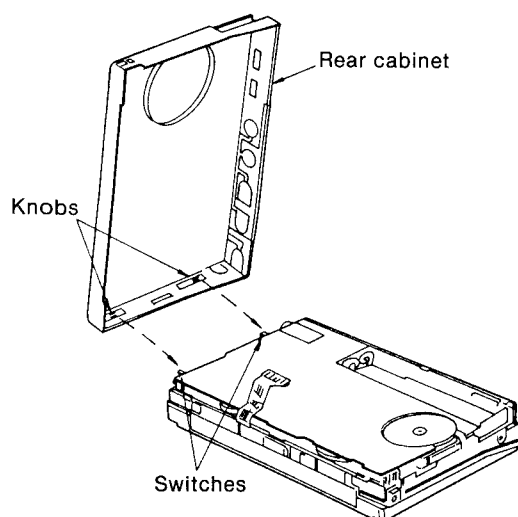


•How to install the main P.C.B.

- Engage the switch in the lever of the mechanism.
- Insert the shaft in the (+) battery terminal.



•How to install the rear cabinet



- Engage the switches in the knobs. (4 points)
- Install the rear cabinet while pushing the (+) battery terminal.

MEASUREMENTS AND ADJUSTMENTS

ADJUSTMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ADJUSTMENT	
1. Set volume control to maximum.	5. Set power source voltage to 1.5V DC.
2. Set Dolby NR Switch to OFF.	6. Output of signal generator should not be higher than necessary to obtain an output reading.
3. Set Hold Switch to OFF.	
4. Set S-XBS Switch to OFF.	

TAPE DECK ADJUSTMENT

ITEM	TEST TAPE	MEASUREMENT POINT	ADJUSTMENT POINT	PROCEDURE
Tape speed	QZZCWAT (3kHz, -10dB)	Headphones jack (16Ω) (Refer to Fig. 1)	VR2 (Refer to Fig. 2)	Playback the central part of the tape and adjust VR2 so that the tape speed is as follows. Forward: 2,950 ± 10Hz Reverse: 2,930 ~ 3,030Hz Make sure that the frequency range is within ±60Hz for between "Forward" and "Reverse" mode.

Note: The playback head is supplied on the head arm assembly. (See the Mechanical parts location on page 17.) The assembly requires no adjustment.

ADJUSTMENT POINT

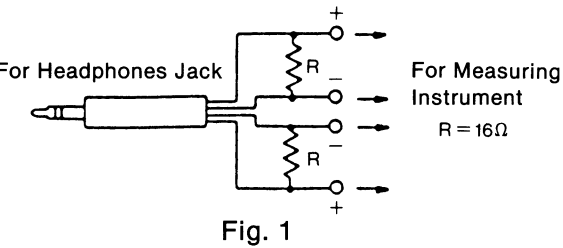


Fig. 1

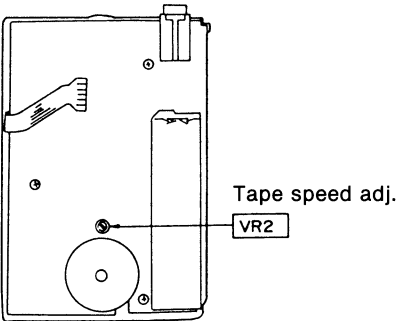


Fig. 2

TERMINAL FUNCTIONS OF IC

IC4 (TB2001FN009E): Mechanism control

Terminal No.	Terminal Name	I/O	Function	Terminal No.	Terminal Name	I/O	Function
1	GND	—	GND terminal	9	PLAY CHECK	I	Mechanism status detection signal. "H": FWD, "L": REV
2	OSC	I/O	System clock terminal fosc=3.2kHz	10	T.END	I	Tape rotation detection signal. ON signal: Normal condition NO signal: STOP, REV PLAY
3	CL	I	Clear terminal	11	REV MODE	I	Reverse mode switching signal "H": ⤴ mode, "L": ⤵ mode
4	LID	I	Detection signal whether the cassette tape is inserted.	12	MEM	I	Forward/Reverse distinction signal input "L": Forward, "H": Reverse
5	REW	I	Mechanism operation (REW) signal. When a high pulse is input: switches to the REV mode.	13	DIR CONT	O	Power switch signal.
6	FF	I	Mechanism operation (FF) signal. When a high pulse is input: switches to the FF mode.	14	SP	O	Motor speed up signal.
7	PLAY	I	Mechanism operation (PLAY) signal. When a high pulse is input: switches to the PLAY mode.	15	CCW	O	Motor control signal for reverse.
8	STOP	I	Mechanism operation (STOP) signal. When a high pulse is input: switches to the STOP mode.	16	MUTE	O	AMP muting signal.
				17	LED	O	LED drive signal. L: LED ON

Terminal No.	Terminal Name	I/O	Function	Terminal No.	Terminal Name	I/O	Function
18	SOL	O	Solenoid drive signal for playback.	21	V _{DD}	I	Power supply terminal. DD converter output 2.9V~3V
19	MOTOR	O	Motor drive signal (MOTOR ON). L: Motor ON	22	L2	—	Not used, open.
20	PEE	O	Beep sound output when the unit is controlled remotely.	23	L1	O	DC/DC converter drive signal.
				24	V _{CC}	I	Power supply terminal.

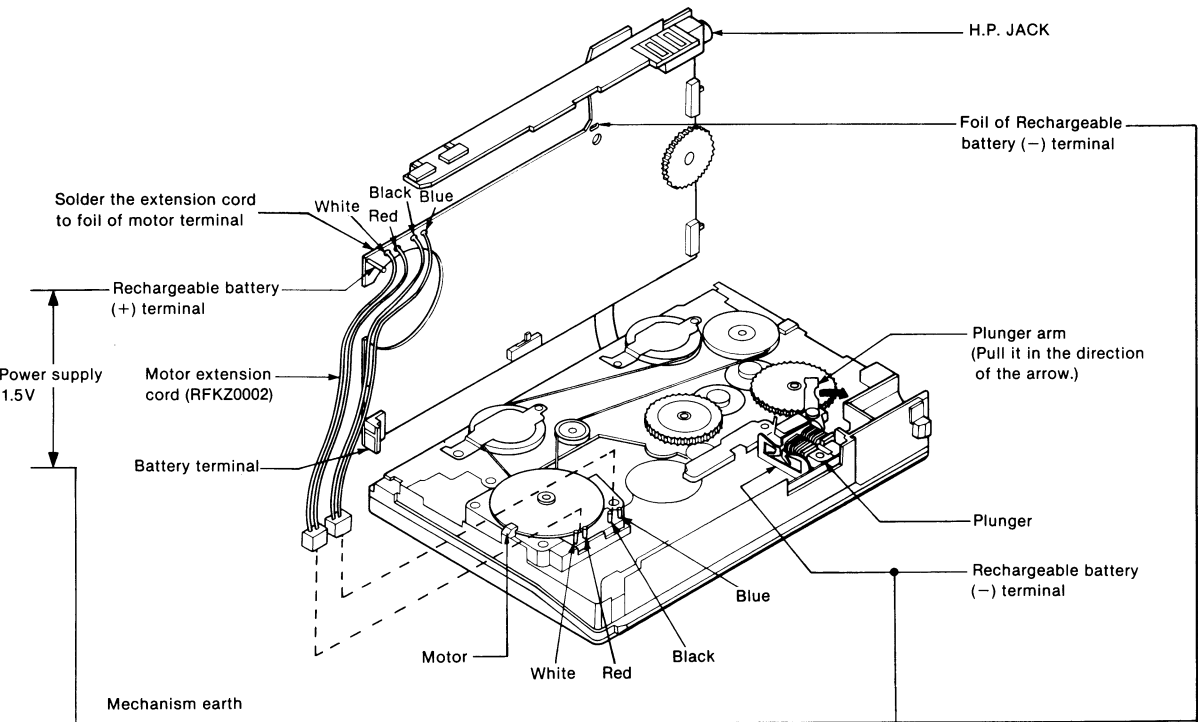
HOW TO CHECK OPERATIONS DURING DISASSEMBLY AND SERVICING

- Check operations during disassembly following the steps.
 - Set the condition as shown in Fig. 1 in accordance with Ref. Nos. 1 and 2 on Page 5 of the Disassembly Instructions. (DO NOT remove the solders on the head FPC.)
 - Connect the PCB and motor with the extension cord (RFKZ0002).
 - Solder the short land with a lead wire and then short-circuit them.
 - Short-circuit across C51 (between IC4 ③ pin and ground.)
 - Short-circuit the short land ④.

Note: See next page for the points to be short-circuited.

 - Connect the rechargeable battery (+) terminal and the rechargeable battery (-) terminal foil to the power source (1.5V) with a lead wire. (See Fig. 1)
 - Connect the rechargeable battery (-) terminal foil and the rechargeable battery (-) terminal with a lead wire (mechanism earth).
 - Manually operate the plunger when checking the PLAY/STOP operation.
 - Manually pulling the plunger arm once sets the FWD mode; twice, REV; and, three times, STOP.

Note: • Operate the plunger manually. Even if the operation buttons are pressed, the plunger will not be actuated.
• Even if the mechanism unit is switched to the FWD mode in Step 6, the head change-over switch (IC1) will remain in the REV position, so set the REV mode to check the audio.
• After checking, unsolder the short land ④ and lead wire.



SCHEMATIC DIAGRAM

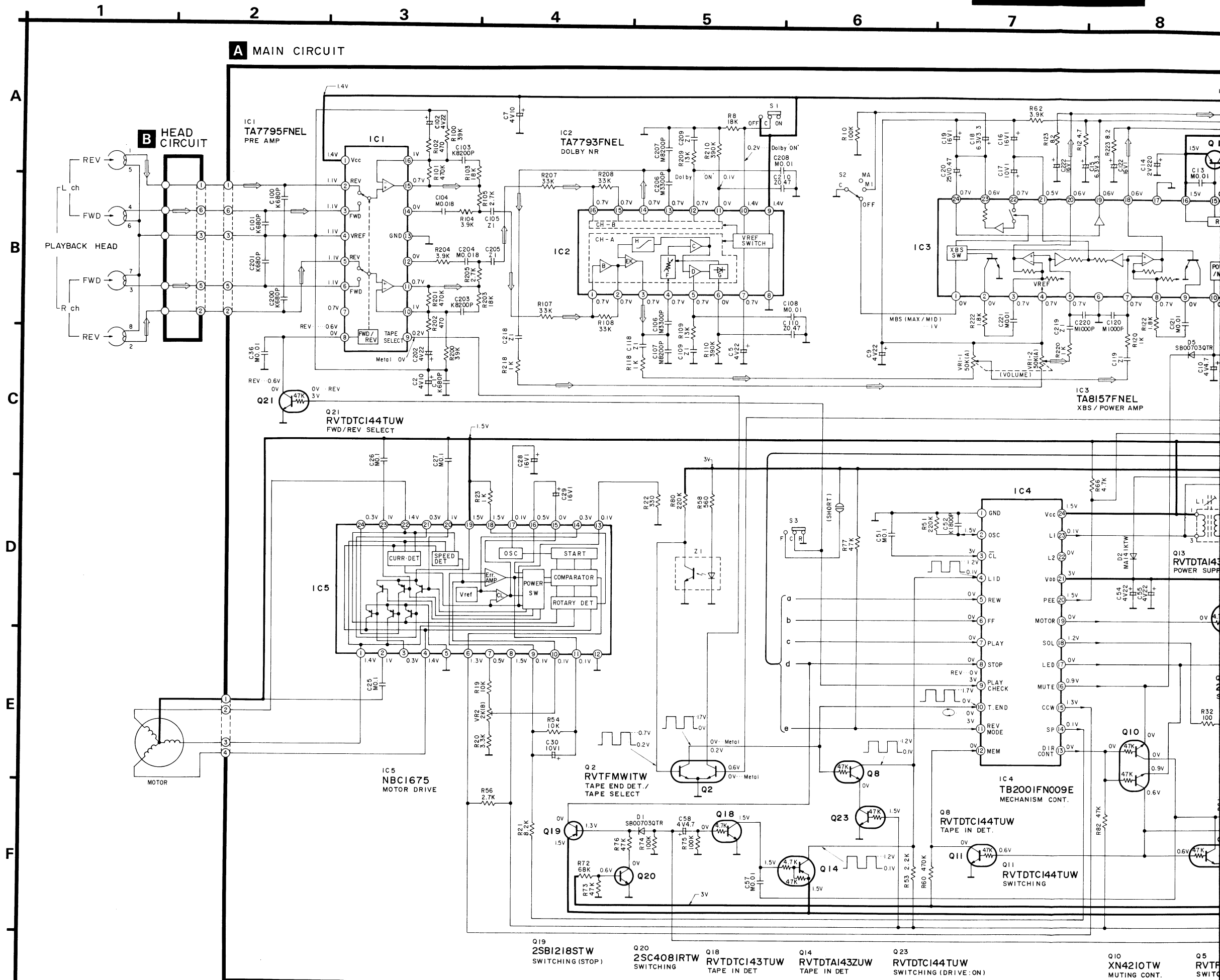
(Parts list on pages 15, 18.)

Notes:

- S1 : Dolby NR switch in "ON" position.
- S2 : S-XBS switch in "OFF" position.
- S3 : FWD/REV switch in "REV" position.
- S4 : REVERSE MODE switch in "C" position.
- S5 : STOP switch in "OFF" position.
- S6 : PLAY/DIR switch in "OFF" position.
- S7 : FF switch in "OFF" position.
- S8 : REW switch in "OFF" position.
- S9 : HOLD switch in "OFF" position.
- S10-1 : Leaf switch (open) in "OFF" position.
- S10-2 : Leaf switch (metal) in "OFF" position.
- VR1 : Volume control VR.
- VR2 : Tape speed adj. VR.
- DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
- No mark...Playback
- Battery current: No signal.....174mA (VR: MIN)
- Maximum output.....186mA (VR: MAX)

• This schematic diagram may be modified at any time with the development of new technology.

⋯⊕ B LINE
 ⋯→ ...PLAYBACK SIGNAL

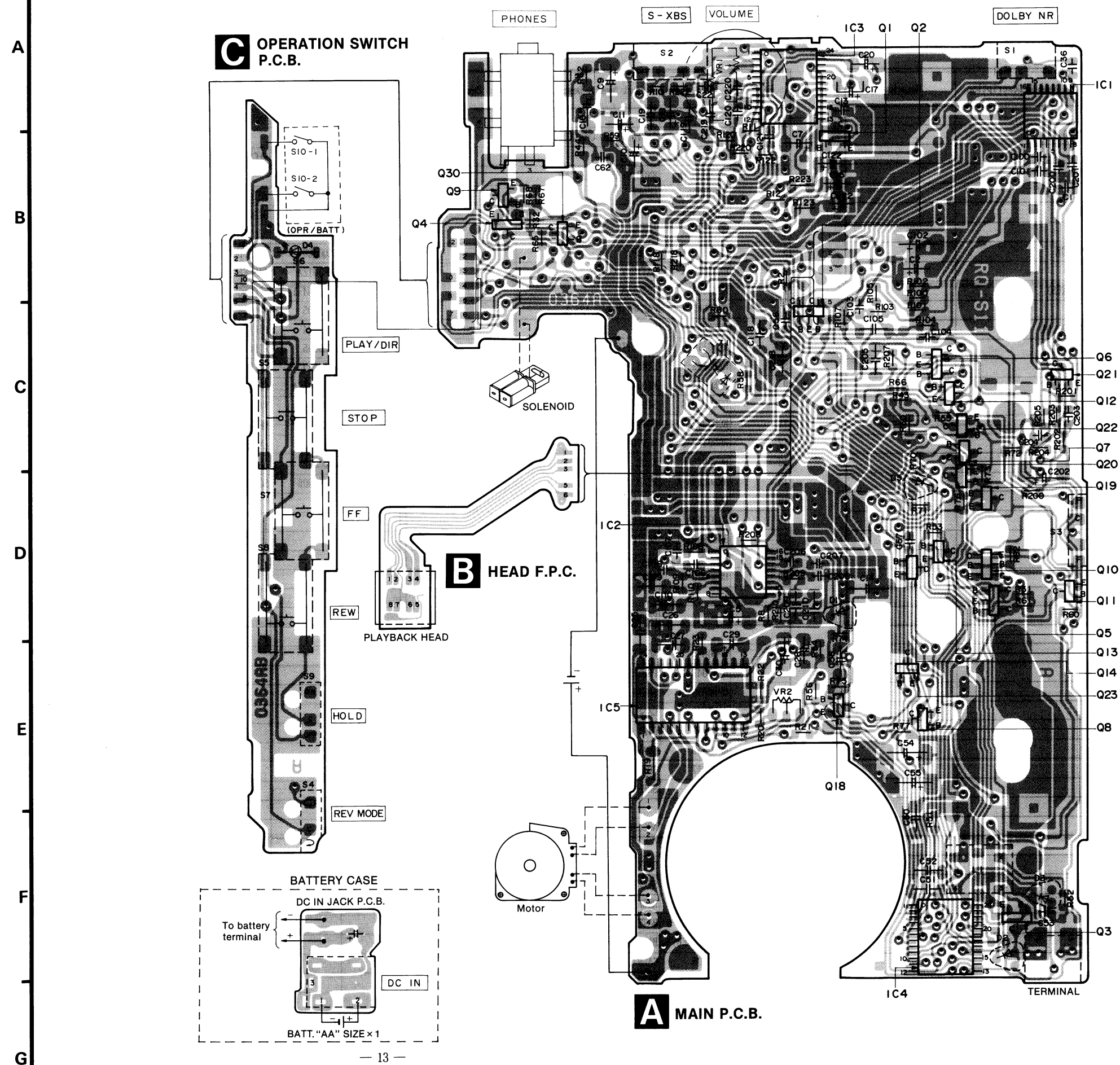


The diagram shows the wiring for the control panel of a VCR. It includes the following components and connections:

- Terminal 1:** Connected to the (OPEN/CLOSE) switch (S10-1).
- Terminal 2:** Connected to the (NOR/METAL) switch (S10-2).
- Terminal 3:** Connected to the (FF) switch (S7).
- Terminal 4:** Connected to the (HOLD) switch (S9).
- Terminal 5:** Connected to the (REV MODE) switch (S4).
- Terminal 6:** Connected to the (STOP) switch (S5).
- Terminal 7:** Connected to the (PLAY/DIR) switch (S6).
- Terminal 8:** Connected to the (REW) switch (S8).
- Terminal 9:** Connected to the (PR/BATT) switch (S4).
- Terminal 10:** Connected to the (FF) switch (S7).
- Terminal 11:** Connected to the (HOLD) switch (S9).
- Terminal 12:** Connected to ground.

The diagram also shows the internal wiring of the switches and the connection to the (PR/BATT) switch (S4).

PRINTED CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM

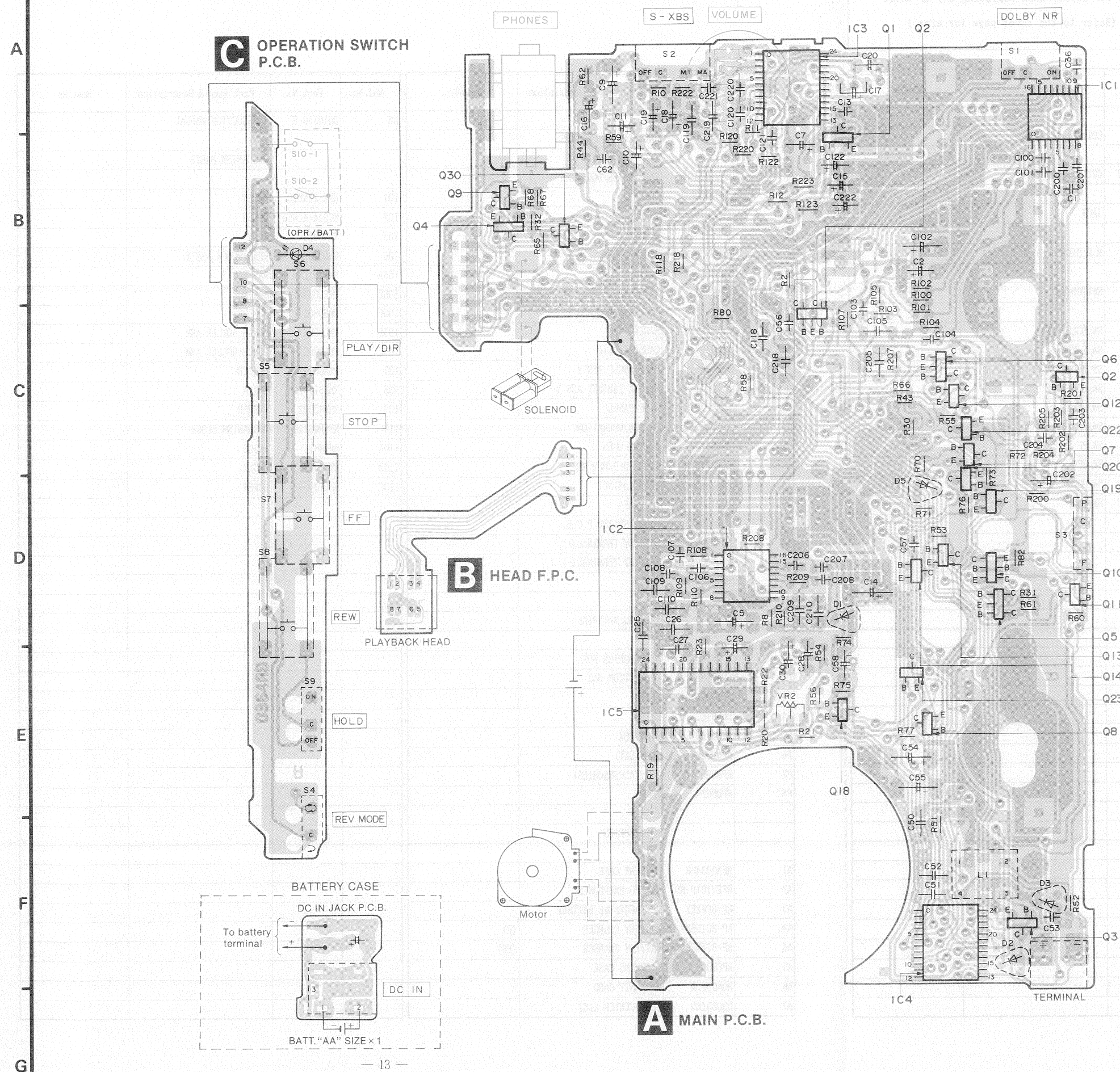


- Notes:**
- This diagram shows a front view of the IC mounting surface.
 - The circuit shown in (●) on the conductor indicates printed circuit on the back side of the printed circuit board.
 - The circuit shown in (○) on the conductor indicates printed circuit on the front side of the printed circuit board.
 - The symbols (•) shown in the circuit board indicate connection points between conductors on the front side and back side of the circuit board.
 - : Chip resistor
 - : Chip jumper (0Ω)
- This circuit board diagram may be modified at any time with the development of new technology.

TERMINAL GUIDE OF IC'S, TRANSISTORS & DIODES

NBC1675 TA8157FNEL TB2001FN009E 	TA7793FNEL TA7795FNEL
XN4210TW 	RVTFMW1TW RVTFMA5TW RVTFMG6TW
LN1261CTR 	MA141KTW SB00703QTR

PRINTED CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM



Notes:

This diagram shows a front view of the IC mounting surface.

1. The circuit shown in () on the conductor indicates printed circuit on the back side of the printed circuit board.
2. The circuit shown in () on the conductor indicates printed circuit on the front side of the printed circuit board.
3. The symbols (•) shown in the circuit board indicate connection points between conductors on the front side and back side of the circuit board.
4. — : Chip resistor
5. — : Chip jumper (0Ω)

• This circuit board diagram may be modified at any time with the development of new technology.

TERMINAL GUIDE OF IC'S, TRANSISTORS & DIODES

NBC1675 TA8157FNEL TB2001FN009E 	TA7793FNEL TA7795FNEL
XN4210TW 	RVTFMW1TW RVTFMA5TW RVTFMG6TW
	2SB815B7TW 2SB1218STW 2SC4081RTW 2SD1328STW RVTDTA114TUW RVTDTA114YUW RVTDTA143ZUW RVTDTA143TUW RVTDTA144TUW
LN1261CTR 	MA141KTR SB00703QTR

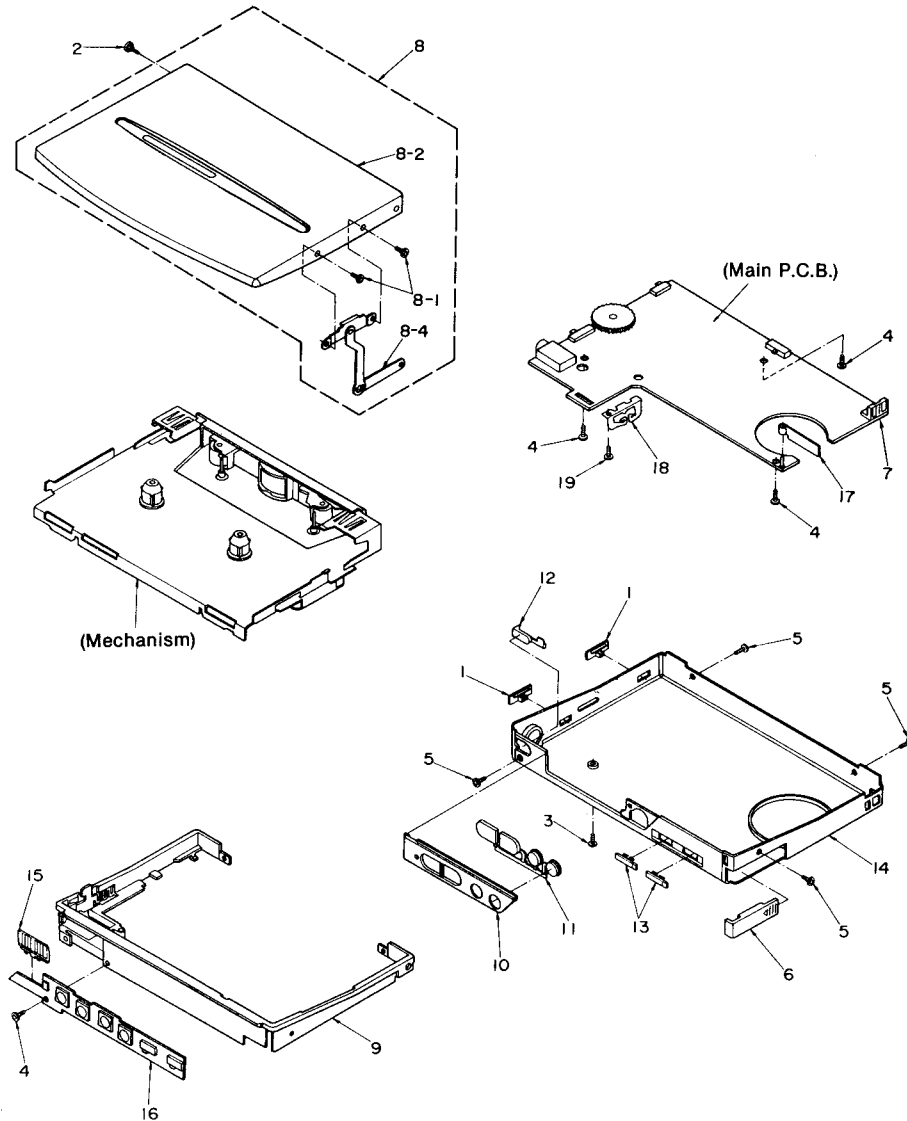
REPLACEMENT PARTS LIST

Notes : * Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)				COIL(S)	
IC1	TA7795FNEL	IC, PRE AMP		L1	RL09U008T-T	COIL	
IC2	TA7793FNEL	IC, DOLBY NR				JACK	
IC3	TA8157FNEL	IC, XBS/POWER AMP					
IC4	TB2001FN009E	IC, MECHANISM CONTROL		J1	RJJ35T02-C	H. P. JACK	
IC5	NBC1675	IC, MOTOR DRIVE				SWITCH(ES)	
		TRANSISTOR(S)					
Q1	2SB815B7TW	TRANSISTOR		S1	RSS2A003-A	SW, DOLBY NR	
Q2	RVTFMW1TW	TRANSISTOR		S2	RSS3A001-A	SW, S-XBS	
Q3	2SD1328STW	TRANSISTOR		S3	RSS2A002-A	SW, FWD/REV	
Q4	2SB815B7TW	TRANSISTOR		S4	RSS2A003-A	SW, REV MODE	
Q5	RVTFMG6TW	TRANSISTOR		S5	RSP1A009-H	SW, STOP	
Q6	RVTFMA5TW	TRANSISTOR		S6	RSP1A009-H	SW, PLAY/DIR	
Q7	2SB1218STW	TRANSISTOR		S7	RSP1A009-H	SW, FF	
Q8	RVTDT144TUW	TRANSISTOR		S8	RSP1A009-H	SW, REW	
Q9	2SC4081RTW	TRANSISTOR		S9	RSS2A003-A	SW, HOLD	
Q10	XN4210TW	TRANSISTOR		S10	RSH1B001-6U	SW, LEAF	
Q11	RVTDT144TUW	TRANSISTOR					
Q12	RVTDTA114TUW	TRANSISTOR					
Q13, 14	RVTDTA143ZUW	TRANSISTOR					
Q18	RVTDT143TUW	TRANSISTOR					
Q19	2SB1218STW	TRANSISTOR					
Q20	2SC4081RTW	TRANSISTOR					
Q21	RVTDT144TUW	TRANSISTOR					
Q22	RVTDT144YUW	TRANSISTOR					
Q23	RVTDT144TUW	TRANSISTOR					
Q30	RVTDTA114TUW	TRANSISTOR					
		DIODE(S)					
D1	SB00703QTR	DIODE					
D2, 3	MA141KTW	DIODE					
D4	LN1261CTR	DIODE					
D5	SB00703QTR	DIODE					
		VARIABLE RESISTOR(S)					
VR1	EVUT0BA01A54	V. R. VOLUME CONTROL					
VR2	RVNDA23B1W-F	V. R. TAPE SPEED ADJ.					
		COMPONENT COMBINATION(S)					
Z1	RVSGP2S24BC	COMPONENT COMBINATION					

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS		A8	RQT0530-E	INSTRUCTION MANUAL	
						MECHANISM PARTS	
1	RGV0034-K1	KNOB, S-XBS/DOLBY NR		101	HPX-26NB1C	MOTOR	
2	RHD14008-K	SCREW		102	XQS14+A18FZ	SCREW	
3	RHE5079YA	SCREW		103	RDV0003	BELT	
4	RHE5119ZA	SCREW		106	FXQ0006	HEAD BLOCK ASS'Y	
5	RHQ0003-K	SCREW		106A	RNW101ZA	WASHER	
6	RKK0018-K	BATTERY COVER		106B	RME0004-1	SPRING	
7	RJH9201	TERMINAL		106C	RME0005	SPRING	
8	RYF0062-K	CASSETTE LID ASS'Y		106D	RXL0004	PINCH ROLLER ARM	
8-1	RHE5097ZA	SCREW		106E	RXL0005	PINCH ROLLER ARM	
8-2	RKF0117-K	CASSETTE LID		107	RMA0023	HOLDER	
8-4	RXM0002	LINK ANGLE ASS'Y		108	RHE5147ZA	SCREW	
9	RYK0111	MIDDLE CABINET ASS'Y		109	RHW42002	WASHER	
10	RGK0220-S	SIDE PANEL		110	RFKRQS11E	MECHANISM BLOCK	
11	RGU0303-S	BUTTON, OPERATION		110A	RMQ0011	ANGLE	
12	RGU0312-S	BUTTON, OPEN		110B	RMQ0012	ANGLE	
13	RGV0015-K	KNOB, HOLD/REV MODE		110C	RHD14006	SCREW	
14	RKS0069A-K	REAR CABINET					
15	RSH1B001-6U	SW, LEAF					
16	RJB0364A	PANEL SWITCH P. C. B.					
17	RJC99003-1	BATTERY TERMINAL (+)					
18	RJC99004-2	BATTERY TERMINAL (-)					
19	RHQ0013	SCREW					
		PACKING MATERIAL					
P1	RPQ0096	ACCESSORIES BOX					
P2	RPF0048-1	PROTECTION BAG					
P3	RP10018-2	SHEET					
P4	RPK0101	CASE					
P5	RPK0160	GIFT BOX					
P6	RPN0346	TRAY (SET)					
P7	RPN0347	TRAY (ACCESSORIES)					
P8	RPQ0024	SHEET					
		ACCESSORIES					
A1	RFA0034-K	BATTERY CASE					
A2	RFEV101P-KS	STEREO EARPHONES					
A3	RP-BP62EY	RECHARGEABLE BATTERY					
A4	RP-BC155EY-0	BATTERY CHARGER	(E)				
A4	RP-BC155EBYA	BATTERY CHARGER	(EB)				
A5	RFC0006	CARRYING CASE					
A6	RQA0013A	WARRANTY CARD					
A7	RQCB0169	SERVICENTER LIST					

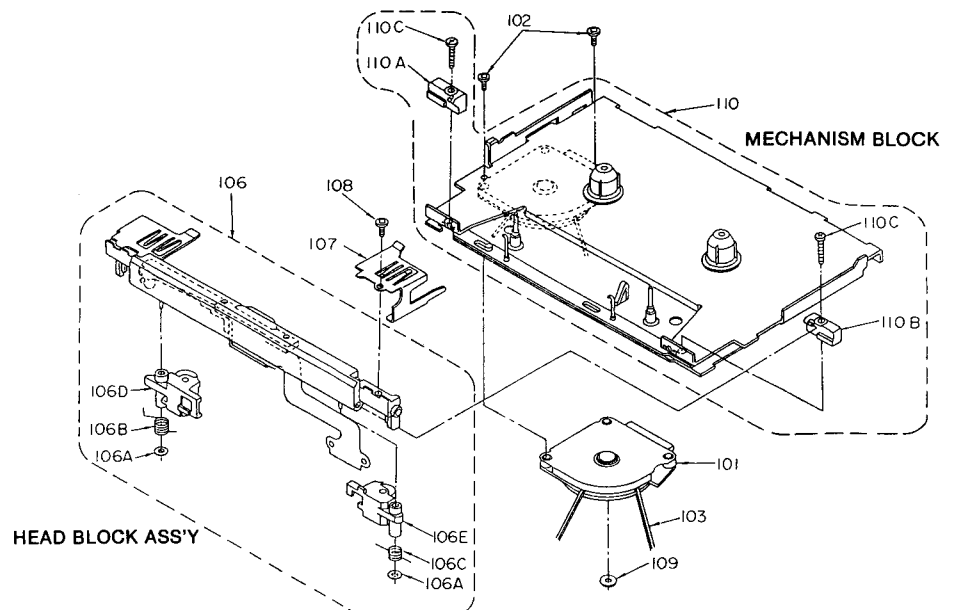
■ CABINET PARTS LOCATION



■ MECHANICAL PARTS LOCATION

	FWD & REV mode
Wow and flutter	0.25% (WRMS)
Pressure of pinch roller	120±20g
Take-up tension	More than 60g
Playback torque	20 ⁺¹⁵ ₋₅ g·cm
FF/REW torque	More than 60g·cm

The parts enclosed in the dotted boxes are supplied as a block assembly. Therefore, they are not supplied separately.



RESISTORS & CAPACITORS

Notes : * Capacity value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
 * Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS						
R2	ERJ3GEYJ104V	1/16W 100K	R110	ERJ3GEYJ394V	1/16W 390K	C100, 101	ECUV1H681KBV	50V 680P
R8	ERJ3GEYJ183V	1/16W 18K	R118	ERJ3GEYJ102V	1/16W 1K	C102	ECST0GB226RR	4V 22U
R10	ERJ3GEYJ104V	1/16W 100K	R120	ERJ3GEYJ102V	1/16W 1K	C103	ECUV1E822KBV	25V 8200P
R11	ERJ3GEYJ154V	1/16W 150K	R122	ERJ3GEYJ182V	1/16W 1.8K	C104	ECUV1C183MBV	16V 0.018U
R12	ERJ6GEYJ4R7V	1/10W 4.7	R123	ERJ6GEYJ8R2V	1/10W 8.2	C105	ECUV1C1052FM	16V 1U
R19	RRSN15J103UE	1/20W 10K	R200	ERJ3GEYJ393V	1/16W 39K	C106	ECUV1H332MBV	50V 3300P
R20	ERJ3GEYJ332V	1/16W 3.3K	R201	ERJ3GEYJ474V	1/16W 470K	C107	ECUV1E822MBV	25V 8200P
R21	ERJ3GEYJ822V	1/16W 8.2K	R202	ERJ3GEYJ471V	1/16W 470	C108	ECUV1E103MBV	25V 0.01U
R22	ERJ3GEYJ331V	1/16W 330	R203	ERJ3GEYJ183V	1/16W 18K	C109	ECUV1C1052FM	16V 1U
R23	ERJ3GEYJ102V	1/16W 1K	R204	ERJ3GEYJ392V	1/16W 3.9K	C110	ECUV1C4742FM	16V 0.47U
R30	ERJ3GEYJ683V	1/16W 68K	R205	ERJ3GEYJ272V	1/16W 2.7K	C118, 119	ECUV1C1052FM	16V 1U
R31	ERJ3GEYJ224V	1/16W 220K	R207, 208	ERJ3GEYJ333V	1/16W 33K	C120	ECUV1H102MBV	50V 1000P
R32	ERJ3GEYJ101V	1/16W 100	R209	ERJ3GEYJ133V	1/16W 13K	C121	ECUV1E103MBV	25V 0.01U
R43	ERJ3GEYJ102V	1/16W 1K	R210	ERJ3GEYJ394V	1/16W 390K	C122	ECST1CY105LL	16V 1U
R44	ERJ3GEYJ101V	1/16W 100	R218	ERJ3GEYJ102V	1/16W 1K	C200, 201	ECUV1H681KBV	50V 680P
R51	ERJ3GEYJ224V	1/16W 220K	R220	ERJ3GEYJ102V	1/16W 1K	C202	ECST0GB226RR	4V 22U
R52	ERJ3GEYJ220V	1/16W 22	R222	ERJ3GEYJ182V	1/16W 1.8K	C203	ECUV1E822KBV	25V 8200P
R53	ERJ3GEYJ222V	1/16W 2.2K	R223	ERJ6GEYJ8R2V	1/10W 8.2	C204	ECUV1C183MBV	16V 0.018U
R54	ERJ3GEYJ103V	1/16W 10K			CAPACITORS	C205	ECUV1C1052FM	16V 1U
R55	ERJ3GEYJ822V	1/16W 8.2K	C1	ECUV1H681KBV	50V 680P	C206	ECUV1H332MBV	50V 3300P
R56	ERJ3GEYJ272V	1/16W 2.7K	C2	RCSX0GY106LE	4V 10U	C207	ECUV1E822MBV	25V 8200P
R58	ERJ3GEYJ561V	1/16W 560	C5	ECST0GB226RR	4V 22U	C208	ECUV1E103MBV	25V 0.01U
R59	ERJ3GEYJ155V	1/16W 1.5M	C7	RCSX0GY106LE	4V 10U	C209	ECUV1C1052FM	16V 1U
R60	ERJ3GEYJ474V	1/16W 470K	C9	ECST0GB226RR	4V 22U	C210	ECUV1C4742FM	16V 0.47U
R61	ERJ3GEYJ224V	1/16W 220K	C10	ECST0GY475LL	4V 4.7U	C218, 219	ECUV1C1052FM	16V 1U
R62	ERJ3GEYJ392V	1/16W 3.9K	C11	RCSX0GY106LE	4V 10U	C220	ECUV1H102MBV	50V 1000P
R65	ERJ3GEYJ222V	1/16W 2.2K	C13	ECUV1E103MBV	25V 0.01U	C221	ECUV1E103MBV	25V 0.01U
R66	ERJ3GEYJ472V	1/16W 4.7K	C14	ECA0DV221FZ	2V 220U	C222	ECST1CY105LL	16V 1U
R67	ERJ3GEYJ563V	1/16W 56K	C15	ECST0JY335LL	6.3V 3.3U			
R68	ERJ3GEYJ393V	1/16W 39K	C16	ECST1CY105LL	16V 1U			
R70	ERJ3GEYJ474V	1/16W 470K	C17	RCSX1AA105LE	10V 1U			
R71	ERJ3GEYJ473V	1/16W 47K	C18	ECST0JY335LL	6.3V 3.3U			
R72	ERJ3GEYJ683V	1/16W 68K	C19	ECST1CY105LL	16V 1U			
R73	ERJ3GEYJ473V	1/16W 47K	C20	ECST1EY474LL	25V 0.47U			
R74, 75	ERJ3GEYJ104V	1/16W 100K	C25-27	ECUV1C104MBM	16V 0.1U			
R76, 77	ERJ3GEYJ473V	1/16W 47K	C28, 29	ECST1CY105LL	16V 1U			
R80	ERJ3GEYJ224V	1/16W 220K	C30	RCSX1AA105LE	10V 1U			
R82	ERJ3GEYJ473V	1/16W 47K	C36	ECUV1E103MBV	25V 0.01U			
R100	ERJ3GEYJ393V	1/16W 39K	C50	ECUV1C1052FM	16V 1U			
R101	ERJ3GEYJ474V	1/16W 470K	C51	ECUV1C104MBM	16V 0.1U			
R102	ERJ3GEYJ471V	1/16W 470	C52	ECUV1H182KCM	50V 1800P			
R103	ERJ3GEYJ183V	1/16W 18K	C53	ECUV1H221KV	50V 220P			
R104	ERJ3GEYJ392V	1/16W 3.9K	C54, 55	ECST0GB226RR	4V 22U			
R105	ERJ3GEYJ272V	1/16W 2.7K	C56	ECUV1C1042FV	16V 0.1U			
R107, 108	ERJ3GEYJ333V	1/16W 33K	C57	ECUV1E103MBV	25V 0.01U			
R109	ERJ3GEYJ133V	1/16W 13K	C58	ECST0GY475LL	4V 4.7U			
			C62	ECUV1E223MBV	25V 0.022U			